

Unnamed Silt Loam 77-Ida-0538

Classification -- medial over loamy-skeletal, mixed, frigid Typic Vitrandept, grand fir phase.

General Site Characteristics

Location -- Benewah County, Idaho, NE $\frac{1}{4}$ of SE $\frac{1}{4}$, section 15, T. 43 N. R. 3 W., 2.5 miles west on the Dennis Road and 0.2 miles on East Dennis L. O. Road; described -- July 1, 1975, by H. Osborne and M. Amara, reviewed October 17, 1977, by M. A. Fosberg; topography -- small mountain range, mountain, top of a 4000 foot long, steep mountain slope, convex microrelief; slope -- 35 percent; aspect -- southwest 245 degrees; elevation -- 4550 feet; parent material -- Mazama volcanic ash over loess over Striped Peak quartzite; climate -- subhumid with cool dry summers and cool wet winters, estimated mean annual precipitation of 40 to 45 inches; estimated mean annual air temperature of 42°F; drainage -- well drained; runoff -- slight; permeability -- moderately rapid; vegetation or use -- timber production, Abies grandis/Pachistima myrsinites habitat type with Larix occidentalis, Anemone piperi, Clintonia uniflora, Smilacina stellata, Spirea betulifolia, Symphoricarpos albus.

Remarks: This site is stand #17 of the Douglas Fir Tussock Moth Study, Coll. of FWR, University of Idaho.

Pedon Description

01 8-0 centimeters (3-0 inches). Partially decomposed leaves, needles and twigs.

A1 0-20 centimeters (0-8 inches). Dark brown (10YR 3.5/3) silt loam, black (10YR 2/1) moist; weak fine granular structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and fine pores; abundant very fine and fine, plentiful medium and coarse roots; 5 percent quartzite gravels; abrupt wavy boundary.

B211r 20-41 centimeters (8-16 inches). Yellowish brown (10YR 5.4/4) gravelly silt loam, dark yellowish brown (10YR 3/4) moist; weak fine to medium subangular blocky structure; weakly coherent, friable, nonsticky and slightly plastic; common very fine to medium pores; abundant micro to coarse roots; 15 percent gravels; clear wavy boundary.

B221r 41-56 centimeters (16-22 inches). Yellowish brown (10YR 5/4) very gravelly silt loam, dark yellowish brown (10YR 3.5/4) moist; weak to moderate fine to medium subangular blocky structure; slightly hard, firm, slightly sticky and slightly plastic; few very fine and fine, common medium pores; few micro and very fine, abundant medium roots; 50 percent quartzite gravels; mixed volcanic ash and underlying materials; clear wavy boundary.

Unnamed Silt Loam 77-Ida-0538

IIB2 56-86+ centimeters (22-34+ inches). Pale brown (10YR 6/3) very gravelly fine sandy loam, brown (10YR 4/3) moist; weak fine to medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; many fine and medium pores; plentiful micro to coarse roots; 80 percent quartzite gravels.

Pedon: 63/qs/F
 Unnamed Silt Loam 77-Ida-0538

Date: July 1978

Sample No.	Horizon	Depth	pH paste	ECX10 ³	PW at Saturation	Available P	Sesquioxides			
							Di-Citrate Fe	Extract Al	Pyrophosphate Fe	Extract Al
		cm		mmhos/cm	%	ppm				
1	O1	8-0	-	-	-	-				
2	A1	0-20	5.8	0.8	76	8.2				
3	B211r	20-41	6.1	0.4	45	1.2				
4	B221r	41-56	6.0	0.3	34	0.2				
5	IIB2	56-85+	6.0	0.6	23	0.0				

Sample No.	Exchangeable Ions				Ext. Acidity	CEC	Base Saturation	OM	C	N	C:N	Soil Fraction	NaF pH
	Ca	Mg	Na	K	H								
	meq/100 gms						%		%		ratio		
1	-	-	-	-	-	-	-	-	-	-	-	-	-
2	3.3	1.7	0.4	1.1	18.9	46.4	26	14.2	8.3	0.50	17	0.94	9.9
3	6.5	1.1	0.5	0.6	11.2	21.4	44	3.8	2.2	0.17	13	0.71	10.3
4	4.8	0.7	0.4	0.7	9.2	17.3	42	2.0	1.1	0.11	10	0.45	10.0
5	2.5	0.3	0.4	0.3	3.7	7.3	49	0.6	0.4	0.04	10	0.13	9.4

Remarks: CECs leached with 10% acidified NaCl.
 Nitrogens and CECs ran on the Technicon.

Analysis by: Nancy Parrott

Pedon: 63/qs/F

Unnamed Silt Loam 77-Ida-0538

Date: August 1978

Depth	Particle Size Distribution (mm)							Gravel & Stone			Textural Classes
	VCS	CS	MS	FS	VFS	TS	TSi	TC	> 2 mm		
	2-1.0	1-0.5	0.5-0.25	0.25-0.1	0.1-0.05	2-0.05	0.05-0.002	< 0.002	wt.	vol.	
cm	%							%			
8-0	-	-	-	-	-	-	-	-	-	-	-
0-20	1.49	2.86	3.29	9.20	6.54	23.37	61.12	15.51	6	2	Silt loam
20-41	2.11	3.53	3.88	12.08	8.55	30.15	53.07	16.78	29	11	Gr. silt loam
41-56	3.30	4.02	4.32	14.16	7.89	33.69	51.31	15.00	55	41	V. gr. silt loam
56-86+	4.21	6.23	6.73	21.49	10.76	49.41	43.93	6.66	87	80	V. gr. fine sandy loam

Depth	Silt Size Distribution (mm)			Bulk Density	Water Content		Liquid	Plastic	Plastic
	CoSi	MSi	FSi		1/3	15	Limit	Limit	Index
	0.05-0.02	0.02-0.005	0.005-0.002		Bar	Bar			
	%			g/cc	%		%		
8-0	-	-	-	-	-	-	-	-	-
0-20	No clods			-	62.9	31.1	NDNP	NDNP	NDNP
20-41	No clods			-	40.6	18.1	NDNP	NDNP	NDNP
41-56	1.5			-	32.8	14.2	26	24	2
56-86+	1.6			-	18.6	7.3	NDNP	NDNP	NDNP

Remarks: Centrifuge method, 5% sodium hexametaphosphate added, sonified.
A bulk density of 0.8 was used in samples 0-20cm and 20-41cm to calculate volume of gravels.

Analysis by: A. Falen
N. Parrott - Atterbergs